Attorney Det No. HSS-016XX Filed: Herewith Group Art Unit:

REMARKS

This Preliminary Amendment puts the claims into proper form for examination. Notes that claims 3-5 and 7 have been amended; new claims 10-12 have been added; and claims 1, 2, 6, 8, and 9 remain unchanged. Kindly calculate the filing fee based on the amended claims.

The Examiner is encouraged to telephone the undersigned attorney to discuss any matter which would expedite allowance of the present application.

Respectfully submitted,

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Red-lined claims for the Examiner's convenience

- 3. The process as claimed in one of the preceding claims 1 wherein said surface is a human or animal tissue section and/or endothelioid cells and/or protein chips and/or a cultivated piece of human or animal tissue.
- 4. The process as claimed in one of the preceding claims 1 wherein the cell-specific target structures are identified in a process comprising the following steps:
 - (V) automatically depositing a reagent solution Y1 that includes at least one marker molecule on said cell-specific target structure;
 - (VI) allowing the reagent solution Y1 to react, and automatically detecting at least one marker pattern of the target structure labeled with the reagent solution Y1;
 - (VII) removing said reagent solution Y1 before or after
 detecting the marker pattern, and repeating steps
 (I) and (II) with further reagent solutions Yn (n =
 2, 3, ..., N) each containing said at least one
 marker molecule and/or at least another marker
 molecule; and

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- (VIII) combining the marker patterns detected in step (II) to give a complex molecular combination pattern of the cell-specific target structure.
- 5. The process as claimed in one of the preceding claims 1 wherein the selected target structures are biochemically characterized in procedural step e) by means of a molecule or molecular complex separation process, in particular a protein separation process.
- 7. The process as claimed in one of the preceding claims 1 wherein the following procedural step is performed after procedural step d):
- d1) conducting inhibition experiments regarding one or plural ingredients of the cell-specific target structures selected in procedural step (d) for detecting a binding hierarchy of the ingredients.